BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA AND THE CALIFORNIA ENERGY COMMISSION

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Order Instituting Rulemaking to Implement the Commission's Procurement Incentive Framework and to Examine the Integration of Greenhouse Gas Emission Standards into Procurement Policies.	Rulemaking 06-04-009 (Filed April 13, 2006)
Order Instituting Informational Proceeding – AB 32.	CEC Docket No. 07-OIIP-01

SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY REPLY COMMENT ON IDENTIFICATION OF EMISSION MEASURES, MODELING APPROACH, AND DATA RESOURCES

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Dated: January 18, 2008

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In accordance with the Administrative Law Judges' Ruling Requesting Comments on Modeling-Related Issues ("Modeling Ruling") issued on November 9, 2007, in the captioned proceeding and the Administrative Law Judges' Ruling Extending Comment Deadlines and Addressing Procedural Matters ("Extension Ruling") issued on November 30, 2007, the Southern California Public Power Authority ("SCPPA") respectfully submits this reply comment. In accordance with the Modeling Ruling, this reply comment is being submitted simultaneously to both the California Public Utilities Commission ("CPUC") and the California Energy Commission ("CEC") (jointly, "Commissions").

I. THE OPENING COMMENTS DEMONSTRATE THAT E3 HAS MADE SO MANY ERRONEOUS ASSUMPTIONS ABOUT THE OPERATIONS OF PUBLICLY OWNED UTILITIES THAT THE E3 STUDY, ABSENT REVISION, WOULD NOT PROVIDE A VALID BASIS FOR ESTABLISHING GREENHOUSE GAS EMISSION REDUCTION POLICIES FOR THE ELECTRIC SECTOR.

The opening comments of various parties, particularly the Los Angeles Department of Water and Power ("LADWP") and the Sacramento Municipal Utility District ("SMUD"), demonstrate that Energy and Environmental Economics, Inc. ("E3") has made so many erroneous assumptions about the operations of publicly owned utilities ("POUs") that the E3 study, absent revision, should not be used as a basis for making policy decisions about the appropriate regulatory framework for regulating greenhouse gas ("GHG") emissions in the electric sector.

A. E3 Has Made Erroneous Assumptions About the POUs.

The opening comments of LADWP, SMUD, and others illustrate various errors in E3's assumptions about the operations of California POUs.

1. LADWP

E3, using the PLEXOS model, completely dispatches LADWP's entitlement share of the Navajo Generating Station along with approximately 4 million tons of CO_2 emissions. LADWP Opening Comment at 6. However, LADWP's Navajo Project Co-Tenancy Agreement expires December 31, 2019, and LADWP will not be renewing the contract, given the restrictions of the Emission Performance Standards established under SB 1368. *Ibid* at 5. Thus, E3, using the PLEXOS modeling, incorrectly assigns 4 million tons of CO_2 emissions to LADWP for 2020. That is a significant error. The 4 million tons of CO_2 would be equal to roughly 25 percent of LADWP's total 2020 GHG emissions. *Ibid* at 6.

E3 compounds its error by retaining LADWP's entitlement share of Navajo Generating Station while simultaneously assuming the addition of 1,000 megawatts ("MW") of energy efficiency and approximately 2,000 MW of renewable resources to LADWP's resource mix. *Ibid* at 6. The assumption that Navajo capacity would be retained while adding energy efficiency and renewable resources would result in LADWP being substantially over-resourced.

E3, using PLEXOS, then assumes that Navajo would continue to be dispatched in accordance with a "least cost" dispatching protocol. It should not be assumed that all retail providers will dispatch resources using any single protocol, including the "least-cost" protocol. Even if it were assumed, contrary to fact, that LADWP would continue to have available to it Navajo capacity in 2020, it should not be assumed that Navajo would continue to be fully dispatched even though LADWP had made E3's assumed investments in energy efficiency and renewable resources. *Ibid* at 10.

2. SMUD

SMUD, like LADWP, points out errors in E3's Stage 1 documentation: "The document significantly overstates SMUD's carbon emissions, incorrectly attributes SMUD's renewable portfolio standard contracts to the entire state, substantially underreports SMUD's energy efficiency gains, and effectively disregards any true representation of SMUD's resources or loads in the inputs for a model purporting to depict SMUD as one of the seven entities explicitly modeled." SMUD Opening Comment at 1. For example, SMUD points out the following errors:

- The SMUD-owned 688 MW Upper American River Project (hydroelectric) is not attributed to SMUD but, instead, is included in the Northern California mix. *Ibid* at 3.

- The model accurately characterized only approximately 30 percent of SMUD's specified resources, with the other 70 percent being mischaracterized as system purchases. *Ibid*.

- The model assumes as a base-case that SMUD will only achieve 14 percent RPS by 2020 under a business-as-usual scenario, although SMUD made a commitment in 2001 to achieve a 20 percent RPS by 2011. *Ibid*.

SMUD goes on to point out other errors. For example, although E3 attributes photovoltaic installations to the investor owned utilities ("IOUs"), E3 attributes *no* photovoltaic installations to any POUs, including SMUD. SMUD has been installing photovoltaics since the mid-1980s. *Ibid* at 5. Going forward, California POUs will participate in the California Solar Initiative established under Senate Bill ("SB") 1 (2006). Over the course of the program, POUs will spend $784 million. Cal. Pub. Util. Code § 387.5(g).

3. "Northern Other" and "Southern Other"

Aside from LADWP, SMUD, Pacific Gas and Electric Company ("PG&E"), Southern California Edison Company ("SCE"), and San Diego Gas and Electric Company ("SDG&E"), E3 aggregates all California retail providers into two categories, "Northern Other" and "Southern Other," based upon the retail provider's location. The aggregation makes it difficult for an individual retail provider other than LADWP, SMUD, PG&E, SCE, or SDG&E to identify E3 assumptions about the individual retail provider's operations. SCPPA has been unable to identify some of the plants that are included in the E3 database. Conversely, SCPPA is uncertain about whether all of the resources upon which SCPPA members rely have been properly included in the database.

Furthermore, the aggregation of retail providers other than LADWP, SMUD, PG&E, SCE, and SDG&E into "Northern Other" and Southern Other" results in electric service providers ("ESPs") being included in the aggregation with POUs and with IOUs that have a small California footprint such as PacifiCorp. The ESPs, POUs, and IOUs that are aggregated in "Northern Other" and "Southern Other" may have sharply different characteristics that are masked by the aggregation. *See* Alliance for Retail Energy Markets Opening Comment at 3.

The "Northern Other" and "Southern Other" groups should be disaggregated to permit each retail provider to determine whether E3's assumptions about it are appropriate and, also, to assure that attributes that may be appropriate for some of the retail providers are not erroneously assigned to others.

B. Given the Status of E3's Modeling of POUs, the Commissions Should not Reach Policy Decisions on the Basis of the E3 Study Absent Revision.

According to the Extension Ruling issued on December 21, 2007, in this proceeding, the Commissions intend to issue a "proposed decision on basic GHG regulatory framework for electricity and natural sectors (chiefly type and point of regulation and some allowance allocation-related issues)" in "late January or February 2008." Extension Ruling at 18. Given the well-documented fact that the E3 modeling effort has failed to make appropriate assumptions about the POUs, the Commissions should avoid basing any policy determinations that might be reached in the proposed decision on the E3 study. The Commissions should await further refinement of the study to address the POU issues as well as other issues that have been raised in the opening comments before placing reliance upon the E3 effort as a tool to aid the Commissions' decision-making process.

II. PG&E, SCE, AND SDG&E IMPROPERLY CHARACTERIZE POU RENEWABLE ENERGY EFFICIENCY PROGRAMS AS BEING LESS ROBUST THAN THE IOU PROGRAMS.

PG&E, SCE, and SDG&E characterize POU renewable standards and energy efficiency programs as being less robust than theirs. PG&E Opening Comment at 3, 6; SCE Opening Comment at 5 ("municipal utilities and their customers should also be held to the same standards as the IOUs and required to contribute equally to California's requirements"); SDG&E Opening Comment at 4 ("implementation of energy efficiency efforts by municipal utilities that are

equivalent to those implemented by IOUs"). The PG&E, SCE, and SDG&E characterization is erroneous.

A. Renewable Portfolio Programs.

The IOU efforts to set and attain renewable portfolio standards are less "robust" than the IOUs claim. Currently, the IOUs are supposed to attain a target of generating 20 percent of total retail sales of electricity from eligible renewable resources by December 31, 2010. Cal. Pub. Util. Code § 399.11. However, the IOUs are falling behind. "Although current law requires that RPS-obligated load-serving entities (LSEs) meet 20% of their retail energy needs with renewable generation by 2010, flexible compliance rules effectively extend that date to 2013." Center for Energy Efficiency and Renewable Technologies ("CEERT") Opening Comment at 13. Green Power Institute ("GPI") points out "that the utilities are currently on trajectories to reach the twenty percent benchmark by 2013 at the earliest, and that achieving the benchmark by 2013 is far from assured." GPI Opening Comment at 2. CEERT proposes that, as a result: "The base case scenario adopted by the Commission should be based on generation from renewable energy resources increasing to 20% by 2013 and remaining constant at 20% through 2020." CEERT, *ibid* at 19.

Conversely, the POU's efforts to add renewables are more robust than claimed by PG&E, SCE, and SDG&E. The POUs are not limited to establishing an RPS of 20 percent, and they are aiming higher. For example, LADWP is not only aiming to achieve a 20 percent renewable standard in 2010. Additionally: "The cornerstone of the GREEN LA Plan is increasing the City's use of renewable energy to 35% by 2020." LADWP Opening Comment at 12. Another SCPPA member, Burbank, has established an RPS of 33 percent to be achieved in 2020. Other SCPPA members are considering more aggressive renewable portfolio standards, as well.

B. Energy Efficiency Programs.

As for energy efficiency, PG&E claims that "POU cost-effective energy efficiency potential should be greater than from IOUs, given the more robust IOU CEE programs that have been in place many years." PG&E Opening Comment at 16. PG&E claims that POUs "as a group should have more 'low-hanging fruit' in terms of cost-effective additional CEE." E3 assumed the opposite, however. Instead of assuming that there was more "low-hanging fruit" within the POU service territories, E3 assumed there was a *lower* energy efficiency potential in the POU service territories.

In fact, since 1998, SCPPA members have spent a more than $260 million on energy efficiency and demand reduction management programs. Utility customers have benefited from rebates and incentives for energy efficiency measures such as high-efficiency lighting, appliances, air conditioners, and motors. Other programs include tree planting for shading purposes, energy management systems to passively turn off lighting and air conditioning when not in use and LED lighted traffic signals. In addition to monetary incentives member utilities conduct education and communication programs designed to educate customers about the benefits of energy efficiency.

However, even if PG&E is correct and there is more potential in the POU service territories than the IOU service territories to pursue energy efficiency, Assembly Bill ("AB") 2021 (Levine) requires POUs to pursue the potential: "Each local publicly owned electric utility, in procuring energy to serve the load of its retail end-use customers, shall first acquire all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible." Cal. Pub. Util. Code § 9615(a). In pursuing the additional energy efficiency, POUs will experience cost and rate impacts that will be higher than in the IOU service territories where, if PG&E is correct, energy efficiency measures have already accomplished demand

reductions. E3 should assume that POU service territories have an energy efficiency and demand reduction potential that is at least equivalent to the potential in adjacent IOU service territories. Likewise, consistent with AB 2021, E3 should assume that POUs will fully realize the energy efficiency and demand reduction potential in their service territories.

III. SDG&E'S ADVOCACY OF BREACH OF CONTRACT AS A GHG REDUCTION MECHANISM SHOULD BE GIVEN NO WEIGHT.

SDG&E advocates "action specifically targeted to electricity from [coal] plants" including "early termination of contracts, re-powering plants to use natural gas, early plant closure, or carbon sequestration," SDG&E at 5; *Ibid* at 7. SCPPA agrees that carbon sequestration should be pursued. To that end, SCPPA is in the process of funding a study of the potential for carbon sequestration. The other measures suggested by SDG&E, particularly, "early termination of contracts" should be categorically rejected to the extent to which they would require a breach of existing contracts.

The contracts that bind SCPPA members to participate in coal-fired generation facilities such as the Intermountain Power Project in Utah ("IPP") underlie the bonds that were used to finance the construction of the facilities. Breach of the contracts would result in a bond default. Breach of contract should not be considered as a valid GHG reduction mechanism.

In other contexts, Sempra Energy affiliates have strongly endorsed sanctity of contracts. For example, Sempra affiliates staunchly supported the sanctity of a Sempra affiliate's 2001 contract to deliver electricity to the California Department of Water Resources. It is highly inappropriate for a Sempra affiliate to propose that utilities breach lawfully binding contracts.

IV. PG&E'S NUMBERS CHARACTERIZING THE POUS ARE INCONSISTENT.

PG&E contends that POUs represent "*32 percent*" of electricity consumption in California for 2006 but only 5.4 percent of energy savings. PG&E Opening Comment at 11

(footnote 26). Elsewhere, PG&E contends that POUs serve *25 percent* of the electric load in California, but POUs are "responsible on a load-based calculated basis for nearly 42 percent of the source-specific CO_2 emissions in the electric sector." *Ibid* at 3. PG&E's numbers are inconsistent. SCPPA has been unable to determine the basis for PG&E's inconsistency.

V. E3'S WIND INTEGRATION COSTS ARE, IF ANYTHING, UNDERSTATED RATHER THAN OVERSTATED.

Some parties contend that E3 has overstated the cost of integrating wind resources. *See* CEERT Opening Comment at 35, 37-38; NRDC/UCS Opening Comment at 10-11, 13-15. In its opening comment, SCPPA pointed out that, to the contrary, certain transmission or integration costs are not adequately captured by the E3 study. SCPPA Opening Comment at 9, 13-14, 15. SCPPA recommends that E3 run scenarios to determine wind costs more accurately and, also, that E3 rerun PLEXOS to insure the feasibility of each scenario. This approach would more accurately bound the potential for wind development.

VI. CONCLUSION.

For the reasons discussed above, SCPPA cautions the Commissions against using the E3 study, absent correction, as a basis for reaching policy determinations that are presented in the proposed interim decision that is due to be released at the end of January or in early February, 2008. SCPPA, further, urges the Commissions to direct E3 to continue to refine its study as suggested in SCPPA's opening and reply comments as well as in the comments of others in this proceeding.

Respectfully submitted,

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Dated: January 18, 2008

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the **SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY REPLY COMMENT ON IDENTIFICATION OF EMISSION MEASURES, MODELING APPROACH, AND DATA RESOURCES** on the service list for CPUC Docket No. R.06-04-009 and CEC Docket No. 07-OIIP-01 by serving a copy to each party by electronic mail and/or by mailing a properly addressed copy by first-class mail with postage prepaid.

Executed on January 18, 2008, at Los Angeles, California.

/s/ Sylvia Cantos

Sylvia Cantos

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